

CLAIMS

What is claimed is:

1. An electronic regulatory compliance method for a plurality of wastewater systems, said plurality of wastewater treatment systems being installed at
5 plurality of different locations, said wastewater treatment systems being serviced by one or more service companies having one or more service personnel, a regulatory body for monitoring said plurality of wastewater treatment systems with respect to timely servicing of said plurality of wastewater treatment systems, said method comprising:
automatically monitoring for operational equipment status at each of said
10 plurality of wastewater treatment systems;
automatically notifying said one or more service companies of operational problems detected at each of said plurality of wastewater treatment systems;
detecting a physical presence of said one or more service personnel at each of
said plurality of wastewater treatment systems;
15 determining a time associated with said physical presence of said one or more service personnel at each of said plurality of wastewater treatment systems;
electronically storing inspection data related to scheduled inspections for each of said plurality of wastewater treatment systems;
automatically storing operational data related to said operational equipment
20 status detected at each of said plurality of wastewater treatment systems;
automatically storing time data related to said physical presence of said one or more service personnel at each of said plurality of wastewater treatment systems; and
generating a report for said regulatory body related to compliance with said
scheduled inspection and timely repairs for each of said plurality of plurality of
25 wastewater treatment systems based on said inspection data, said operational data, and said time data.
2. The regulatory compliance method of claim 1, further comprising:
providing computer capability on behalf of said regulatory body to
automatically generate notices of noncompliance with scheduled inspection and timely
30 repairs utilizing said inspection data, said operational data, and said time data for each of said plurality of wastewater treatment systems.

FOOTNOTES

5 4. The regulatory compliance method of claim 1, further comprising:
generating a website operable for selectively providing said inspection data, said
operational data, and said time data to respective computers of said one or more service
companies and said regulatory body.

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8. The regulatory compliance method of claim 1, wherein said step of electronically detecting a physical presence further comprises providing one or more mechanical switches adjacent each of said plurality of wastewater treatment systems to be activated by said one or more service personnel for recording said physical presence.

9. The regulatory compliance method of claim 1, wherein said step of electronically detecting a physical presence further comprises providing an electronic reader adjacent each of said plurality of wastewater treatment systems to be activated by a respective identifier carried each of said one or more service personnel for recording said physical presence.

10. The regulatory compliance method of claim 1, determining whether each service contract has been timely renewed.

11. The regulatory compliance method of claim 10, further comprising:
providing said regulatory body with capability of automatically generating
5 notices of noncompliance where service contracts have not been timely renewed.

12. A regulatory compliance system operable with a plurality of wastewater treatment systems, said wastewater treatment systems being serviced by one or more service companies having one or more service personnel, a regulatory body for monitoring said plurality of wastewater treatment systems with respect to timely servicing of said plurality of wastewater treatment systems, said system comprising:

an electronic monitor for producing operational data related to operational problems at each of said plurality of wastewater treatment systems;

a physical presence detector for producing personnel data related to a presence of said one or more service personnel at each of said plurality of wastewater treatment systems;

a clock for providing clock data related to said personnel data for each of said plurality of wastewater treatment systems;

one or more processors for collecting said operational data, said personnel data, and said clock data; and

one or more data storage elements for electronically storing inspection data related to scheduled inspections requiring said physical presence of said one or more service personnel for said plurality of wastewater treatment systems, said one or more storage elements being operable for storing said operational data, said personnel data, and said clock data.

25 13. The regulatory compliance system of claim 12, further comprising:
 a computer network, said computer network being operable for communicating
data from said one or more storage elements with one or more computers of said
regulatory body.

14. The regulatory compliance system of claim 12, wherein said clock data provides time and date of said presence of said one or more service personnel at each of said plurality of wastewater treatment systems.

5 15. The regulatory compliance system of claim 12, wherein said one or more storage elements are utilized for storing responsibility data related to said plurality of different owners for said plurality of wastewater treatment systems.

10 16. The regulatory compliance system of claim 15, wherein said responsibility data comprises address information for contacting responsible parties for said plurality of wastewater treatment systems.

17. The regulatory compliance system of claim 12, further comprising one or more network servers programmed to generate a website accessible by said one or more computers of said regulatory body.

15 18. The regulatory compliance system of claim 17, wherein said website comprises selectable options for generating information related to compliance with scheduled inspections and timely repairs for said plurality of wastewater treatment systems, said selectable options comprising an option to provide information indicating noncompliance with regulations related to said scheduled inspections and timely repairs.

20 19. The regulatory compliance system of claim 17, wherein said website further comprises selectable options for generating information related to failure to renew service contracts along with said address information for transmission to responsible parties for said plurality of wastewater treatment systems.

25 20. A regulatory compliance system operable with a plurality of environmental equipment systems, said environmental equipment systems being serviced by one or more service personnel, a regulatory body for monitoring said plurality of environmental equipment systems, said system comprising:

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an electronic monitor for automatically producing operational data related to operation of each of said plurality of environmental equipment systems;

one or more data storage elements for electronically storing inspection data related to scheduled inspections of said plurality of environmental equipment systems,
5 for storing said operational data, and for storing responsibility data related to responsible parties for said plurality of environmental equipment systems; and

one or more network servers for controlling computer network communications between said one or more storage elements and one or more computers of said regulatory body such that said one or more network servers are programmed to generate
10 a website accessible by said one or more computers of said regulatory body through said computer network, said website comprising selectable options for generating reports related to compliance with said scheduled inspections, said operational data, and said responsible parties for said plurality of environmental equipment systems.

21. The regulatory compliance system of claim 20, wherein said website comprises selectable options for printing said reports related to compliance with scheduled inspection requirements and timely repair requirements for each of said plurality of environmental equipment systems.

22. The regulatory compliance system of claim 20, wherein said selectable
20 options comprise an option to provide noncompliance reports indicating noncompliance with scheduled inspection requirements and timely repair requirements for said plurality of environmental equipment systems, said reports indicating noncompliance and comprising address information related to said responsible parties.

23. The regulatory compliance system of claim 20, wherein said selectable
25 options comprise an option to provide noncompliance reports indicating failure to renew a service contract.

24. The regulatory compliance system of claim 20, further comprising selectable printing options accessible by said regulatory body for automatically printing notices related to noncompliance of said scheduled inspections and timely repair

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regulations for transmission to said responsible parties for said plurality of environmental equipment systems.

25. The regulatory compliance system of claim 20, wherein said responsibility data comprises ownership data related to ownership of said plurality of environmental equipment systems.

26. The regulatory compliance system of claim 20, further comprising a personnel detector for said plurality of environmental equipment systems for producing personnel data related to detecting an actual physical presence of said one or more service personnel at said plurality of environmental equipment systems.

27. A regulatory compliance method operable with a plurality of environmental equipment systems, said environmental equipment systems being serviced by one or more service personnel, a regulatory body for monitoring said plurality of environmental equipment systems, said method comprising:

providing an electronic connection from each of said plurality of environmental equipment systems to one or more computers;

receiving digital data by said one or more computers from said plurality of environmental equipment systems through said electronic connection from each of said plurality of environmental equipment systems;

electronically storing said digital data from said plurality of environmental equipment systems;

electronically connecting to one or more computers of said regulatory body; and electronically communicating with said one or more computers of said regulatory body relating to said digital data received from said plurality of environmental equipment systems.

28. The regulatory compliance method of claim 27, wherein said step of electronically connecting further comprises:

making available a network connection to said one or more computers of regulatory body.

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29. The regulatory compliance method of claim 27, further comprising:
providing that said regulatory body may utilize said digital data for generating
reports related to said plurality of environmental equipment systems.

5 30. The regulatory compliance method of claim 27, further comprising:
generating reports related to compliance with scheduled inspections and timely
repairs for said plurality of environmental equipment systems.

31. The regulatory compliance method of claim 27, further comprising:
detecting a time and date of a physical presence of said one or more service
personnel at said plurality of environmental equipment systems.

10 32. The regulatory compliance method of claim 27, further comprising
storing contact data related to communicating with parties responsible for said plurality
of environmental equipment.

15 33. The regulatory compliance method of claim 32, wherein said contact
data related to communicating with parties responsible for said plurality of
environmental equipment comprises address information for contacting said parties.

34. The regulatory compliance method of claim 27, wherein said digital data
further comprises data related to said scheduled inspections, data related to system
operations functions detected electronically, and data collected electronically related to
system inspections and repairs.

20 35. The regulatory compliance method of claim 27, further comprising:
collecting time and date data related to a service personnel presence at each of
said plurality of environmental equipment systems;
electronically comparing time and date data relating to requirements for said
scheduled inspections and said timely repairs; and
25 generating reports related to noncompliance with scheduled inspections and
timely repairs.

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36. The regulatory compliance method of claim 27, further comprising:
generating noncompliance notices indicating failure to renew a service contract.

37. The regulatory compliance method of claim 27, further comprising:
generating a record of when said environmental equipment system starts initial
5 operation for a first time or after a shutdown wherein repairs are made.

38. The regulatory compliance method of claim 37, further comprising:
detecting a physical presence of one or more service personnel for said initial
operation.

39. A compliance method operable with a plurality of environmental
10 equipment systems, said environmental equipment systems being serviced by one or
more service personnel, a regulatory body for monitoring said plurality of
environmental equipment systems, said method comprising:
collecting digital data from said plurality of environmental equipment systems;
electronically storing said digital data from said plurality of environmental
15 equipment systems;
producing a website; and
providing access to said website by said regulatory body whereby reports related
to said digital data from said plurality of environmental equipment systems is
retrievable by said regulatory body.

40. The regulatory compliance method of claim 39, further comprising:
providing access to said website by one or more service companies whereby at
least selective of said digital data from said plurality of environmental equipment
systems is retrievable by said one or more service companies.

41. The regulatory compliance method of claim 39, further comprising:
providing that said regulatory body may utilize said digital data for generating
reports related to said plurality of environmental equipment systems.

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42. The regulatory compliance method of claim 39, further comprising:
generating reports related to compliance with scheduled inspections and timely
repairs for said plurality of environmental equipment systems.

5 43. The regulatory compliance method of claim 42, further comprising:
generating noncompliance notices indicating noncompliance of said scheduled
inspections and timely repair regulations for said plurality of environmental equipment
methods including data related to communicating with parties responsible for said
plurality of environmental equipment.

10 44. The regulatory compliance method of claim 43, wherein said data related
to communicating with parties responsible for said plurality of environmental
equipment comprises address information for contacting said parties.

45. The regulatory compliance method of claim 39, further comprising
storing said data related to communicating with parties responsible for said plurality of
environmental equipment.

15 46. The regulatory compliance method of claim 39, wherein said digital data
further comprises digital data related to said scheduled inspections, digital data related
to system operations functions detected electronically, and digital data collected
electronically related to system inspections and repairs.

20 47. The regulatory compliance method of claim 39, further comprising:
electronically collecting data related to a physical presence of said one or more
service personnel at said plurality of environmental equipment systems.

48. The regulatory compliance method of claim 39, further comprising:
generating noncompliance notices indicating failure to renew service contracts.

25 49. A compliance method operable with a plurality of environmental
equipment systems for monitoring said plurality of environmental equipment systems

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with respect to timely servicing of said plurality of environmental equipment systems, said environmental equipment systems being serviced by one or more service personnel, said method comprising:

- electronically producing operational data related to operations at each of said plurality of environmental equipment systems;
- producing personnel data related to a physical presence of said one or more service personnel at said plurality of environmental equipment systems;
- electronically providing clock data related to said personnel data for each of said plurality of environmental equipment systems; and
- automatically collecting said operational data, said personnel data, and said clock data.

50. The compliance method of claim 49, further comprising:
electronically storing inspection data related to scheduled inspection requirements requiring said physical presence of said one or more service personnel for each of said plurality of environmental equipment systems.

51. The compliance method of claim 50, further comprising:
electronically sending accumulated reports relating to said operational data, said personnel data, said clock data, and said inspection data to said regulatory body.

52. The compliance system of claim 50, further comprising:
generating a website accessible by said regulatory body.

53. The compliance system of claim 50, further comprising:
generating reports related to compliance with scheduled inspections and timely repairs for said plurality of environmental equipment systems.

54. The compliance system of claim 50, further comprising:
generating notices related to noncompliance with said scheduled inspection requirements or timely repair requirements for transmission to parties responsible for said plurality of environmental equipment systems.

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55. The regulatory compliance method of claim 49, further comprising:
generating a record of when said environmental equipment system starts initial
operation for the first time or after shutdown during which repairs are made.

5 56. The regulatory compliance method of claim 55, further comprising:
detecting a physical presence of one or more service personnel for said initial
operation.

57. The compliance method of claim 49, further comprising:
generating noncompliance notices indicating failure to renew service contracts.

10 58. A compliance method operable for use with a plurality of environmental
equipment systems for monitoring said plurality of environmental equipment systems
with respect to timely servicing of said plurality of environmental equipment systems,
said method comprising:

electronically collecting operational data related to operations at each of said
plurality of environmental equipment systems;

15 producing personnel data related to a physical presence of said one or more
service personnel at said plurality of environmental equipment systems;

providing clock data related to said personnel data for each of said plurality of
environmental equipment systems;

20 collecting said operational data, said personnel data, and said clock data; and
electronically storing inspection data related to scheduled inspections requiring
said physical presence of said one or more service personnel for each of said plurality
of environmental equipment systems.

59. The regulatory compliance method of claim 58, further comprising:
producing a website accessible by said regulatory body whereby reports related
25 to accumulated operational data, personnel data, clock data, and inspection data from
said plurality of environmental equipment systems are retrievable by a regulatory body.

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60. The compliance method of claim 59, further comprising:
providing at least selective access to said website by one or more service
companies whereby at least partial access to said accumulated reports related to
operational data, said personnel data, said clock data, and said inspection data for said
5 plurality of environmental equipment systems is retrievable by said one or more service
companies.

61. The compliance method of claim 58, further comprising:
providing that a regulatory body may selectively generate reports based on said
10 operational data, said personnel data, said clock data, and said inspection data related
to said plurality of environmental equipment systems.

62. The compliance method of claim 58, further comprising:
generating reports related to compliance with said scheduled inspections and
timely repairs for said plurality of environmental equipment systems.

63. The compliance method of claim 59, further comprising:
generating noncompliance notices indicating noncompliance of said scheduled
inspections and timely repair regulations for said plurality of environmental equipment
methods whereby said noncompliance notices include data related to communicating
15 with parties responsible for said plurality of environmental equipment.

64. The compliance method of claim 59, further comprising:
generating noncompliance notices indicating failure to renew service contracts.

65. A compliance system for a plurality of environmental equipment
systems operable for monitoring said plurality of environmental equipment systems
with respect to timely servicing of said plurality of environmental equipment systems,
25 said system comprising:

an electronic monitor for producing operational data related to environmental
equipment operational status at each of said plurality of environmental equipment
systems;

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a clock for providing clock data related to said personnel data for each of said plurality of environmental equipment systems; and

66. The compliance system of claim 65, further comprising:
one or more data storage elements for electronically storing inspection data
10 related to scheduled inspections requiring said physical presence of said one or more
service personnel for each of said plurality of environmental equipment systems, said
one or more storage elements being operable for storing said operational data, said
personnel data, and said clock data.

67. The compliance system of claim 65, further comprising:
15 a computer network, said computer network being operable for communicating data from said one or more storage elements to one or more computers of said regulatory body.

68. The compliance system of claim 65, wherein said clock data provides
a time and a date of said physical presence of said one or more service personnel at said
20 plurality of environmental equipment systems.

69. The compliance system of claim 65, wherein said one or more storage elements are utilized for storing responsibility data related to a plurality of different owners for said plurality of environmental equipment systems.

25 70. The compliance system of claim 65, wherein said responsibility data
comprises address information for contacting responsible parties for said plurality of
environmental equipment systems.

71. The regulatory compliance system of claim 65, further comprising one or more network servers programmed to generate a website accessible by said one or more computers of a regulatory body.

5 72. The regulatory compliance system of claim 71, wherein said website comprises selectable options for generating information related to compliance with scheduled inspection requirements and timely repair requirements for said plurality of environmental equipment systems, said selectable options comprising an option to provide information indicating noncompliance with regulations related to said scheduled inspection requirements and said timely repair requirements.

10 73. The regulatory compliance method of claim 65, further comprising:
generating a record of when said environmental equipment system is placed in operation for the first time or after being shut down for repairs.

15 74. The regulatory compliance method of claim 73, further comprising:
detecting a physical presence of one or more service personnel related to said equipment system being placed into operation.

20 75. A regulatory compliance method operable with a plurality of environmental equipment systems, said environmental equipment systems being serviced by one or more service companies having one or more service personnel, a third party, a regulatory body for monitoring said plurality of environmental equipment systems with respect to timely servicing of said plurality of environmental equipment systems, said method comprising:

receiving digital data related to said timely servicing of said plurality of environmental equipment systems by one or more computers of said third party;

25 electronically storing said digital data related to said plurality of environmental equipment systems; and

reporting from said third party to said regulatory body regarding said received digital data relating to said timely servicing of said plurality of environmental equipment systems.

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76. The regulatory compliance method of claim 75, further comprising:
making available a network connection to one or more computers of regulatory
body from said one or more computers of said third party.

5 77. The regulatory compliance method of claim 75, further comprising:
generating reports related to noncompliance for said plurality of environmental
equipment systems, and
sending said reports to said one or more service companies and to parties
responsible for said plurality of environmental equipment systems.

10 78. The regulatory compliance method of claim 75, further comprising:
generating reports related to compliance with scheduled inspections and timely
repairs for said plurality of environmental equipment systems.

15 79. The regulatory compliance method of claim 75, further comprising:
detecting a time and date of a physical presence of said one or more service
personnel at said plurality of environmental equipment systems.

80. The regulatory compliance method of claim 75, further comprising
storing contact data related to communicating with parties responsible for said plurality
of environmental equipment.

20 81. The regulatory compliance method of claim 81, wherein said contact
data related to communicating with parties responsible for said plurality of
environmental equipment comprises address information for contacting said parties.

25 82. The regulatory compliance method of claim 75, wherein said digital data
further comprises data related to schedules for inspections, data related to system
operations functions detected electronically, and data collected electronically related to
physical presence of said one or more service personnel at said plurality of
environmental systems for inspections and repairs.

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83. The regulatory compliance method of claim 75, further comprising:
collecting time and date data related to a service personnel presence at each of
said plurality of environmental equipment systems,
electronically comparing time and date data relating to requirements for
5 scheduled inspections and said timely repairs, and
generating reports related to noncompliance with scheduled inspections and
timely repairs.

84. The regulatory compliance method of claim 75, further comprising:
generating noncompliance notices indicating failure to renew a service contract.

10 85. The regulatory compliance method of claim 75, further comprising:
generating a record of when said environmental equipment system starts initial
operation for a first time or after a shutdown wherein repairs are made.

86. The regulatory compliance method of claim 85, further comprising:
detecting a physical presence of one or more service personnel for said initial
15 operation.

87. The regulatory compliance method of claim 75, wherein said one or
more environmental equipment systems comprise one or more wastewater treatment
systems.

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